

IN THE CLAIMS

1-14. (Canceled)

15. (Currently Amended) A method of manufacturing ~~method of~~ a flat panel display, including joining a substrate ~~which has~~ having an electron emitting element[,] and a faceplate having ~~which has~~ a phosphor screen, so that the electron emitting element and the phosphor screen face to each other with a gap, comprising:

at least one of[[:]] (A) treating the faceplate; and (B) treating the substrate,

wherein[[:]] (A) treating the faceplate comprises[[:]] (a) irradiating ~~of an~~ an electron beam onto the faceplate accommodated in a treatment vessel, while heating the faceplate in a vacuum atmosphere, and (b) forming a getter film on the faceplate, onto which the electron beam is irradiated, by means of ~~the~~ vacuum deposition[[:]]; and

(B) treating the substrate comprises ~~an~~ irradiating ~~of the~~ the electron beam onto the substrate accommodated in a treatment vessel, while heating the substrate in a vacuum atmosphere[[:]].

said method further comprising:

(C) assembling the substrate and the faceplate, at least one of which has been irradiated with the electron beam; and

(D) heating and joining the assembled ~~one~~ substrate and faceplate in a vacuum atmosphere.

16. (Currently Amended) The method of claim 15, wherein the faceplate and the substrate are accommodated in ~~the a~~ a same treatment vessel, both held with a predetermined spacing ~~distanced~~, and the electron beam is irradiated onto the faceplate and the substrate ~~them~~ alternately or simultaneously from two or more electron sources.

17. (Currently Amended) The method of claim 15, wherein the electron beam is irradiated alternately or simultaneously from two or more electron sources ~~which are~~ disposed in the treatment vessel in at least one of the irradiating of the electron beam onto the faceplate and the irradiating of the electron beam onto the substrate.

18. (Currently Amended) The method of claim 15, wherein the electron beam emitted from the electron source is irradiated, while being deflected, in at least one of the irradiating of the electron beam onto the faceplate and the irradiating of the electron beam onto the substrate.

19. (Currently Amended) The method of claim 15, wherein the electron beam emitted from a planar type of the electron source is irradiated in at least one of the irradiating of the electron beam onto the faceplate and the irradiating of the electron beam onto the substrate.

20. (Currently Amended) The method of claim 15, wherein the electron beam is irradiated in a vacuum atmosphere ~~of which degree of vacuum is maintained at 10^{-3} Torr or less~~ in at least one of the irradiating of the electron beam onto the faceplate and the irradiating of the electron beam onto the substrate.

21. (Currently Amended) The method of claim 15, wherein at least one of the substrate and the faceplate is heated at a temperature in ~~the~~ a range from 200 to 400°C in at least one of the irradiating of electron beam onto the faceplate and the irradiating of the electron beam onto the substrate.

22. (Previously Presented) The method of claim 15, wherein, after the electron beam is irradiated onto at least one of the substrate and the faceplate, the irradiated at least one of the substrate and the faceplate is cooled to a temperature of 100°C or less.

23. (Currently Amended) The method of claim 15, wherein the faceplate and the substrate are joined through a supporting frame in a vacuum atmosphere after the electron beam is irradiated onto at least one of the faceplate and the substrate in ~~(D)~~ the heating and joining step.

24. (Currently Amended) The method of claim 23, wherein the supporting frame is irradiated with the electron beam in the irradiating of the electron beam onto the substrate.

25. (Currently Amended) A manufacturing equipment of a flat panel display, in which a substrate having an electron emitting element and a faceplate having a phosphor screen~~[[,]]~~ are joined so that the electron emitting element and the phosphor screen face ~~to~~ each other with a gap, comprising:

(A) a baking and electron beam cleaning chamber;

~~(B)~~ a vapor deposition chamber in which ~~the~~ a getter film ~~if~~ is formed;

~~(C)~~ an assembly chamber;

~~(D)~~ a heat treatment chamber; and

~~(E)~~ transferring means for transferring and sending at least one of the substrate and the faceplate ~~in~~ into and out of the chambers~~[[;]]~~, wherein:

(A) the baking and electron beam cleaning chamber ~~comprising~~, comprises

(a) a treatment vessel in which at least one of the substrate and the faceplate is accommodated[.];

(b) exhausting means for evacuating ~~the~~ an inside of the treatment vessel to a vacuum atmosphere[.];

(c) irradiating means for irradiating an electron beam onto at least one of the substrate and the faceplate, which are accommodated in the treatment vessel[.]; and

(d) means for heating at least one of the substrate and the faceplate, which are accommodated in the treatment vessel[.];

(B) the vapor deposition chamber ~~comprising,~~ comprises

(a) a treatment vessel in which the faceplate, onto which the electron beam is irradiated, is accommodated[.]; and

(b) means for forming a the getter film on the faceplate by means of ~~the~~ vacuum deposition[.];

(C) the assembly chamber ~~comprising,~~ comprises

(a) a treatment vessel in which the substrate and the faceplate, at least one of which is irradiated with the electron beam, both held with a predetermined spacing ~~distanced,~~ is are accommodated[.]; and

(b) exhausting means for evacuating the inside of the treatment vessel to a vacuum atmosphere[.]; and

(D) the heat treatment chamber ~~comprising,~~ comprises

(a) a treatment vessel in which the assembled object is accommodated[.]; and

(b) means for heating and joining the substrate and the faceplate.